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End-of-life decisions in medical practice: a survey of doctors in Victoria (Australia)

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Objectives: To discover the current state of opinion and practice among doctors in Victoria, Australia, regarding end-of-life decisions and the legalisation of voluntary euthanasia. Longitudinal comparison with similar 1987 and 1993 studies.
Design and participants: Cross-sectional postal survey of doctors in Victoria.
Results: 53% of doctors in Victoria support the legalisation of voluntary euthanasia. Of doctors who have experienced requests from patients to hasten death, 35% have administered drugs with the intention of hastening death. There is substantial disagreement among doctors concerning the definition of *euthanasia*.
Conclusions: Disagreement among doctors concerning the meaning of the term *euthanasia* may contribute to misunderstanding in the debate over voluntary euthanasia. Among doctors in Victoria, support for the legalisation of voluntary euthanasia appears to have weakened slightly over the past 17 years. Opinion on this issue is sharply polarised.

It is very important that the debate around end-of-life decision-making and euthanasia is informed by empirical information about doctors' attitudes and practices. In the Netherlands, a high level of research in this area has contributed greatly to the continuing debate around whether and when medically assisted dying is acceptable, and there is evidence that this debate "seems to be resulting in a stabilisation of end-of-life practices."[1] Around the world, most available studies find strong differences of attitude among doctors with regard to voluntary euthanasia, and end-of-life decision-making practices vary widely from nation to nation. A study of the subject in six European countries found that about a third of all deaths are unexpected and that "for the remaining two-thirds, end-of life decision making seems to be an important issue".[2] This study found that

> End-of-life decisions that are mainly a medical response to the suffering of patients (alleviation of pain and symptoms, ending of life without an explicit request from the patient) seem to be practiced everywhere in modern health care, whereas the frequency of end-of-life decisions that are most strongly determined by cultural factors, such as patient's autonomy, criteria for medical futility, or legal status (euthanasia, non-treatment decisions), varies much between countries.

One of the earliest studies of doctors' practices and attitudes to end-of-life decisions was conducted in Victoria, Australia, in 1987, by Kuhse and Singer.[3] This study was widely cited in the literature, and studies based on the same survey questionnaire and methodology were conducted in 1993 in New South Wales and the Australian Capital Territory by Baume and O'Malley,[4] and in Japan in 1999 by Asai *et al*.[5] Outside of the Netherlands, there are very few longitudinal data available on this issue. The present study repeats and extends the 1987 Victorian study by Kuhse and Singer, using the same sample size and sampling method and largely the same questionnaire (with some modifications described below). This study aims to discover the current state of opinion and practice among doctors in Victoria regarding end-of-life decisions and the legalisation of voluntary euthanasia. It also presents a longitudinal comparison to determine whether there had been any significant shift of opinion on these issues in the Victorian medical profession over the 17 years since the previous study.

METHODS

Subjects and sample

A copy of the Victorian Medical Practitioners Register was obtained from the Medical Practitioners Board of Victoria. "Doctors in Victoria" is defined to mean doctors registered in Victoria on 3 June 2004 whose primary practice address is in Victoria. Doctors registered in Victoria but based interstate or overseas were excluded. The 13 673 doctors eligible for the survey were each assigned an eight-digit random number (using a random number generator), and the lowest 2000 numbers were selected for the mail-out.

Survey instrument

The survey instrument was an anonymous, self-administered mail-out questionnaire. In order to provide a longitudinal comparison with the 1987 and 1993 surveys, the questionnaire was substantially the same as those used in the earlier surveys. However, the 1987 study, in particular, was criticised by many respondents for eliding certain distinctions concerning the manner in which death is hastened and for assuming a definition of euthanasia that was contested by some respondents.[6]

To address these problems, the questionnaire for the present study differs from the 1987 questionnaire in two respects. First, all questions concerning the hastening of death were disambiguated to distinguish between hastening death by, on the one hand, withdrawing or withholding life-sustaining treatment and, on the other, administering drugs. Second, no assumption was made regarding the meaning of *euthanasia*. Questions were added asking doctors how they defined *euthanasia* and whether they personally regarded any intervention they had performed that might have hastened a patient's death as constituting euthanasia.

Administration of questionnaire

The first-round mail-out (June 2004) included a separate ''response received'' postcard with the doctor's name, which was posted to a different address, to protect the anonymity of responses. A reminder letter was posted to non-respondents 1 month after the initial mail-out.

Ethics approval

Ethics approval was obtained from the Monash University Standing Committee on Ethics in Research Involving Humans.

Response rate

After the two mail-outs, 183 letters had been returned to sender because the address was no longer current. Thus a maximum of 1817 questionnaires were delivered. Of these, 854 completed questionnaires were returned, yielding a response rate of 47%, which was slightly higher than the response rate achieved for the 1987 study (46%). A limitation of this study, as with all voluntary postal surveys, is that the possibility of a non-response bias cannot be ruled out.

RESULTS

Table 1 summarises the questionnaires used in the three studies and the responses given.

Some clarification is required regarding the proportion of doctors who reported having withdrawn or withheld treatment and intentionally hastened death by administering drugs. Of the 708 who reported having at least once treated terminally ill patients, 420 (59%) reported having received requests to hasten death by withdrawing or withholding treatment, and 302 (43%) had been asked at least once to hasten death by administering drugs.

Of the 420 doctors who had experienced requests for withdrawing or withholding treatment, 76% reported that they had at least once complied with such a request. Of the 302 doctors who had experienced requests for hastening death by administering lethal drugs, 107 (35%) reported having at least once administered drugs *with the intention* of hastening death.

Of the 434 respondents who had received requests to hasten death, 116 (27%) answered ''yes'' to the question ''Do *you* regard any of your actions that hastened death *as euthanasia*?'' However, analysis of these answers reveals a very complex picture. Of these 116 respondents:

- 58 had administered drugs *with the intention* of hastening death;
- 36 had never administered drugs with the intention of hastening death but had withdrawn or withheld treatment and regarded this as sometimes constituting euthanasia;
- 22 had never administered drugs with the intention of hastening death, nor had they withdrawn or withheld life-sustaining treatment, but they nevertheless regarded themselves as having performed actions that constituted euthanasia. Some of these respondents commented that they regarded pain management, where the intention is to provide a comfortable and dignified death, as euthanasia.

A further 45 respondents reported that, although they had administered drugs with the intention of hastening death, they *did not* regard these actions as constituting euthanasia. Some of these respondents commented that they did not believe that marginal hastening of death in the final hours, when death is already inevitable and imminent, should be considered euthanasia.

The wording of the question about the legalisation of euthanasia was as follows:

> Some overseas jurisdictions (The Netherlands, Belgium and Oregon State, USA) have passed legislation allowing doctors to assist certain patients to end their lives. Do you support, in principle, the introduction of similar legislation in Victoria?

Fifty-three per cent of respondents answered ''yes'' to this question. Of the 116 respondents who indicated that they had at least once hastened a patient's death in a manner they personally regarded as constituting euthanasia, 89 (76%) answered ''yes'' to the question above and 28 (24%) answered ''no''.

Table 2 summarises respondents' views of the definition of *euthanasia*. Of the respondents, 32 (4%) rejected all three definitions and proposed their own. Among these, the most common theme was an emphasis on the etymology of *euthanasia* as ''good death''. Some doctors felt that euthanasia is primarily about the relief of suffering during the dying process and that euthanasia begins when the primary goal of treatment becomes palliation. Several doctors insisted that, even where a drug is administered with the intention to hasten death, the *extent* to which death is hastened is important. For instance, one doctor wrote, ''If ''hastening'' means changing the time to death from 1 h to 10 minutes, then that's not euthanasia. If it means changing it from 1 month or several months to 10 minutes or a few hours, then I will accept the term.''

Doctors were asked to specify whether they treat terminally ill patients ''never'', ''rarely'', ''sometimes'' or ''frequently''. Table 3 shows the proportion of doctors in favour of legalisation of voluntary euthanasia, relative to their experience in treating terminally ill patients. The results indicate that support for the legalisation of euthanasia was substantially lower among doctors with extensive experience in caring for dying patients than among doctors with little or no such experience.

DISCUSSION

Overall, there is a strong concordance between the results of this survey and the findings of the 1987 and 1993 surveys. The present study does not suggest any substantial shift in doctors' practices or attitudes to end-of-life decision-making in the 17 years since the 1993 survey. The legalisation of voluntary euthanasia was supported, in principle, by a narrow majority of doctors, and it appears that in Victoria, support for legalisation had weakened slightly over this period. At the same time, there had been a slight increase in the proportion of doctors who report having administered drugs with the intention of hastening death. On this issue, we also note a point of agreement between our findings and the results obtained by Douglas *et al*[7] in a study to ''determine attitudes among surgeons in Australia to assisted death, and the proportion of surgeons who have intentionally hastened death''. Those authors reported that 36% of surgeons surveyed responded affirmatively to the following question:

> Have you ever, for the purpose of relieving a patient's suffering, given drugs (orally or parenterally, by bolus or by infusion) in doses greater than those required to relieve symptoms, with the intention of hastening the patient's death?

In our survey, 35% of respondents answered the following question affirmatively:

> Have you ever, at a patient's request, administered medication with the intention of hastening that patient's death?

Table 1 ''Yes'' answers given by doctors in Victoria in 2004 to questions concerning end-of-life decisions and voluntary euthanasia, compared with results from 1987 (Victoria) and 1993 (NSW/ACT) surveys

Question (paraphrased in some cases for space reasons)	Survey		
	Victoria 1987 %	NSW/ACT 1993 %	Victoria 2004 % (95% CI)
Profile of respondents			**(n = 854)**
Male	78	76	67
Female	22	24	33
General practitioner	*	45	42
Do your views about the morality of euthanasia derive from a religious faith?	16	*	20 (17.3–22.5)
Have you treated terminally ill patients aged 12 years or older?	82	93	83 (80.5–85.3)
Are requests for hastening of death sometimes reasonable, in the circumstances?	93†	96†	–
Are requests for withdrawal of life-sustaining treatment sometimes reasonable?	–	–	94 (92.0–95.2)
Are requests for administering of lethal drugs sometimes reasonable?	–	–	65 (61.8–68.0)
Has a patient ever asked you to hasten his or her death?	48†	47†	–
Has a patient ever asked you to hasten his or her death by withdrawal or withholding of treatment?	–	–	59 (55.8–62.8)
Has a patient ever asked you to administer medication to hasten his or her death?‡	–	–	43 (39.2–46.2)
Of those who have been asked to hasten death			**(n = 434)**
Faced with a request would you discuss it with:			
other doctors?	67	75	72 (67.9–75.9)
relatives?	75	79	79 (75.3–82.7)
nursing staff?	70	64	66 (61.4–70.0)
a religious adviser?	26	33	14 (11.1–17.5)
Have you ever taken steps to bring about death?	29†	28†	–
Have you, at a patient's request, withdrawn/withheld life-sustaining treatment?§	–	–	76 (71.5–79.5)
Have you, at a patient's request, administered medication with the intention of hastening death?**	–	–	35 (30.2–40.6)
Do you regard any of your actions that hastened death as euthanasia?	–	–	27 (22.7–30.7)
If you did hasten death at least once, do you still feel you did the right thing?	98	93	94 (91.4–96.4)
Has illegality been a factor in refusing to hasten a patient's death?	65†	52†	–
Have you ever refused a patient's request that his or her death be hastened on the grounds that it is illegal to act on such a request?	–	–	60 (55.9–64.9)
Have you ever refused a request for hastening of death that you would have agreed to if it were legal to provide such assistance?	–	–	25 (21.3–29.3)
For all respondents			**(n = 854)**
Do you support the legalisation of voluntary euthanasia?	60	58	53 (50.2–56.6)
Do you support the legalisation of physician assisted suicide?	–	46	–
Do you believe that PAS is preferable to doctors administering lethal drugs?††	–	–	37 (33.6–39.8)
Would you practice voluntary euthanasia if it was legal?	40	50	–
If it were legal to assist certain patients to die, would you be willing to:			
prescribe lethal drugs?	–	–	40 (37.3–43.5)
both prescribe and administer lethal drugs?‡‡	–	–	28 (24.7–30.5)

Affirmative responses are reported as a proportion of all respondents, not just those answering the question. The rate of missing data was less than 2% for all except two questions, as noted.
*The published paper does not provide the relevant statistic; †several questions in the 1987 and 1993 surveys that were ambiguously phrased with regard to ''hastening death'' were disambiguated in the 2004 survey to distinguish between withdrawal of treatment and administration of drugs; ‡708 respondents had treated terminally ill patients (2004 survey); §420 respondents had received such a request (2004 survey); ** 302 had received such a request (2004 survey); ††37.6% of respondents did not answer this question (2004 survey); ‡‡3.8% of respondents did not to answer this question (2004 survey).
–, question not in survey; NEW/ACT, New South Wales/Australian Capital Territory; PAS, physician-assisted suicide.

Table 2 Doctors' views regarding the definition of euthanasia

Questionnaire item	Percentage answering ''yes'' (n = 839) % (95% CI)
Which of the following do you regard as euthanasia?	
(a) euthanasia is the provision of some medication or drug that the doctor believes will hasten the patient's death	20 (17.4–22.6)
(b) that as well as taking active steps, hastening death by *withdrawal or withholding of treatment* sometimes counts as euthanasia	13 (10.8–15.2)
(c) that a doctor's actions count as euthanasia only if he or she acts with the *primary intention* of hastening death	62 (59.2–65.4)
(d) none of the above (provided own definition)	4

We note also a striking similarity between our findings concerning requests to hasten death and the findings of a 1994 study of attitudes among NHS doctors to requests for euthanasia.[8] Ward and Tate reported that 60% of the general practitioners and hospital consultants in one area of England

Table 3 Doctors' views on legalisation of voluntary euthanasia according to experience in treating terminally ill patients

Answer to question ''Have you treated terminally ill patients 12 years or older?''	No.	Supporting legalisation of euthanasia % (95% CI)
Never	135	70 (62.1–77.1)
Rarely	222	59 (53.2–65.8)
Sometimes	337	48 (42.6–53.0)
Frequently	149	42 (34.6–50.0)

had been asked by a patient to hasten the patient's death; 45% had been asked to hasten death by *active* euthanasia and 32% had ''taken active steps to bring about the death of a patient'' who had asked the doctor to do so.

The 1987 study did not stratify respondents who supported the legalisation of euthanasia according to degree of experience with terminally ill patients as we have done in table 3. The 4-point scale we used to indicate level of experience with terminally ill patients is very approximate, and these results should be treated with caution. Nevertheless the findings reported in table 3 suggest that support for the legalisation of euthanasia is significantly lower among doctors who frequently treat terminally ill patients than among doctors who never treat such patients. This finding indicates a need for future research to determine why support for the legalisation of euthanasia is lower among doctors whose clinical practice frequently involves the care of dying patients than among doctors with less experience of terminal illness.

Clearly, and unsurprisingly, opinion on euthanasia is polarised in the medical profession. Hundreds of respondents wrote comments elaborating on or qualifying their answers. Many of those comments expressed moral commitments, ranging from the view that euthanasia is ''absolutely unethical'', equivalent to ''legalised murder'', and fundamentally incompatible with the doctor's role, to the view that terminal patients have a right to assistance in ending their lives with dignity, and even that legalised voluntary euthanasia is the ''hallmark of a civilised and progressive society''. The standard ''for'' and ''against'' arguments are familiar, and were reiterated by many respondents in this study. Of the respondents, 20% stated that their views on euthanasia derived from a religious faith, in comparison with 16% in the 1987 study. Of the 373 respondents who stated that they opposed the legalisation of euthanasia, 127 (34%) indicated that their views on euthanasia derived from a religious faith. Of the 456 respondents who stated that they supported legalisation, 27 (6%) indicated that their views derived from a religious faith. While religion is a factor in explaining the distribution of attitudes regarding euthanasia, its explanatory importance should not be overstated. It is certainly not the case that the debate within the medical profession can be characterised as a conflict between religious and secular ethical principles.

The 1987 and 1993 surveys asked doctors if they thought that a patient's request to have his or her death hastened can sometimes be described as ''rational''. In this survey, we asked separate questions about whether hastening death by withdrawal of treatment is sometimes reasonable (94% agreement) and whether requests to hasten death by administering drugs are sometimes reasonable (65% agreement). The former result suggests that the vast majority of doctors accept that terminal patients have a right to refuse treatment. This raises the question of why only 76% of doctors who have received requests for withdrawal or withholding of life-sustaining treatment reported ever having complied with such a request. This finding suggests two possibilities: either a significant gap exists between doctors' attitudes to requests for withdrawal of treatment and their level of willingness to act on such requests; or a significant proportion of requests to hasten death are considered unreasonable. Further research is needed to define the kinds of circumstances in which doctors generally agree that withdrawal of treatment is reasonable, and to determine whether patients' legal right to refuse treatment is often compromised by doctors' reluctance to accede to such requests.

If it is true that approximately 65% of doctors believe that there are situations in which it is reasonable for a patient to request that death be hastened with drugs, we need to ask why support for the legalisation of euthanasia is significantly lower. A reading of respondents' comments suggests that the answer has to do with scepticism about the usefulness of such laws and concerns about the possibility that such laws might have unintended harmful effects. Some respondents claimed that cases in which euthanasia is justified are relatively rare, and they doubted that laws could be written to cover all and only those cases. Aside from questions of principle, many respondents indicated in their comments that their judgments concerning euthanasia and the law were sensitive to a range of pragmatic considerations. The following points paraphrase some of the concerns that were mentioned repeatedly in comments:

- concerns that end-of-life decision-making is highly nuanced and requires careful attention to the individual patient and context—that the law is too blunt an instrument to assist with situations of this complexity and that legislation would be as likely to confuse or hinder good medical decision-making as to assist terminally ill patients;
- ''slippery slope'' concerns about a progressive broadening of the range of cases in which euthanasia can be applied;
- concerns about inappropriate motives for euthanasia arising from financial or resource pressures within hospitals and nursing homes;
- concerns about requests for euthanasia coming from relatives rather than directly from the patient;
- concerns that patients requesting euthanasia may not have received best-practice palliative care;
- concerns about the quality of decision-making in seriously ill patients;
- concerns about how the introduction of a right to euthanasia might affect the doctor-patient relationship;
- questioning of the assumption that if euthanasia were legalised the treating doctor would provide this ''service''; suggestions that specialist teams should be established with appropriate assessment expertise;
- comments that their end-stage patients were typically not competent, having dementia, for instance, the concern being that a discussion focusing on voluntary euthanasia does not consider the end-of-life moral dilemmas arising in the treatment of incompetent patients.

A key finding of this study is that there is significant disagreement among doctors as to what constitutes euthanasia. The questionnaire asked respondents to choose among the three definitions of euthanasia in table 2. Definition (a) describes what is sometimes referred to as ''active ''euthanasia—where drugs are administered to hasten death. Definition (b) defines euthanasia as including both ''active'' hastening of death and ''passive'' hastening of death by withdrawal of treatment or a decision not to treat. Definition (c) corresponds to the view that the *doctrine of double effect* applies to the definition of euthanasia, such that the intention to hasten death is a *necessary* feature of an act of euthanasia. A medical intervention would not constitute euthanasia on definition (c) if the primary intention of medical intervention is to relieve pain, even if hastening of death were a foreseeable consequence.

A majority (62%) of respondents indicated that where palliative measures will foreseeably shorten the patient's life to some degree, this effect is not a sufficient condition for such measures to count as euthanasia (table 2). Rather, these respondents insisted that euthanasia occurs only where there is a direct intention to cause death. Doctors who agreed with definitions (a) and (b) do not believe that the doctor's intention to hasten death is relevant to the definition of euthanasia.

The fact that there is no common agreement about the meaning of ''euthanasia'' was clearly borne out in comments. For example, the following four remarks were made in response to the question, ''Do *you* regard any of your actions that hastened death *as euthanasia*?'' In each case, the doctors were referring to the administration of analgesia in the final stages of terminal illness, where death was probably hastened by the analgesia. The first two comments were offered as explanation of why the doctor's actions did not constitute euthanasia, and the second two doctors were explaining why they did regard their actions as euthanasia.

> No—Morphine is given primarily to relieve suffering in a terminally ill patient not primarily to end life.
>
> No—I think whenever I have given terminal sedation there have been intractable symptoms to justify it, but whilst my first intent is not to hasten death I often hope it will.
>
> Yes—Giving adequate doses of analgesia for pain in terminal cancer often hastens death. This may be considered a form of euthanasia.
>
> Yes—I consider increasing morphine to high levels to combat pain euthanasia. Even though the amount I have given has been appropriate relative to the pain, it has hastened death none-the-less. The request has been for comfort not earlier death.

This disagreement may contribute to confusion in the euthanasia debate, especially where discussants may not be aware of differences in their conception of euthanasia. In this survey, many doctors who appear to disagree over both the meaning and moral acceptability of euthanasia nevertheless appear to agree as to how pain in terminal patients should be managed. It may be that there is a high level of agreement as to what medical interventions are appropriate for end-stage terminal illness, which is partly obscured by disagreement over how to *describe* such interventions.

Our findings indicate that the majority of doctors in Victoria believe that there is a significant difference between intentional hastening of death and unintended but foreseeable hastening of death, and that they conceive of euthanasia as administering drugs with the direct intention of hastening death. However, we found no significant relationship between doctors' preferred definition of euthanasia and support or opposition to the legalisation of voluntary euthanasia. Of the 532 respondents who believed that euthanasia is the *intentional* hastening of death, 49% supported and 48% opposed the legalisation of voluntary euthanasia (3% undecided). It appears that many doctors do not approach the euthanasia debate in the same way.

In October 2005, the British Medical Association adopted a neutral stance in relation to legislation on assisted dying, stating that it ''believes that the question of the criminal law is primarily a matter for society and for Parliament.''[9] The BMA open debate on this issue at its annual meeting of 28 June 2005 revealed a stark polarity of opinion among its members on this topic. Our findings indicate that opinion among doctors in Victoria is similarly divided.

We argue that to make progress towards greater consensus about euthanasia, it is important to be aware of differences in doctors' understanding of what constitutes ''euthanasia''. It is also important to broaden the discussion beyond theoretical arguments about legal and ethical principles—to address concerns as to how new laws might affect the realities of daily practice and how they might benefit or harm the complex relationship with the dying patient.

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REFERENCES

1 **Onwuteaka-Philipsen BD**, van der Heide A, Koper D, *et al*. Euthanasia and other end-of-life decisions in the Netherlands in 1990, 1995, and 2001. *Lancet* 2003;**362**:395–9.
2 **van der Heide A**, Deliens L, Faisst K, *et al*. End-of-life decision-making in six European countries: descriptive study. *Lancet* 2003;**362**:345–50.
3 **Kuhse H**, Singer P. Doctors' practices and attitudes regarding voluntary euthanasia. *Med J Aust* 1988;**148**:623–7.
4 **Baume P**, O'Malley E. Euthanasia: attitudes and practices of medical practitioners. *Med J Aust* 1994;**161**:137–44.
5 **Asai A**, Ohinishi M, Nagata SK, *et al*. Doctors' and nurses attitudes towards experiences of voluntary euthanasia: survey of members of the Japanese Association of Palliative Medicine. *J Med Ethics* 2001;**27**:324–30.
6 **Letters to the editor: Voluntary euthanasia**. *Med J Aust* 1988;**149**:276.
7 **Douglas CD**, Kerridge IH, Rainbird KJ, *et al*. The intention to hasten death: a survey of attitudes and practices of surgeons in Australia. *Med J Aust* 2001;**175**:511–5.
8 **Ward BJ**, Tate PA. Attitudes among NHS doctors to requests for euthanasia. *BMJ* 1994;**308**:1332–4.
9 **British Medical Association**. BMA policy on assisted dying. http://www.bma.org.uk/ap.nsf/Content/AssistedDyingDebate (accessed 14 Aug 2007).